

**Subject Matter Preparation Programs
for Elementary School Teachers:
Standards of Program Quality
and Effectiveness**

**Handbook for Teacher Educators
and Program Reviewers**

Commission on Teacher Credentialing

State of California

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Revised 1996

Subject Matter Preparation Programs for Elementary School Teachers: Standards of Program Quality and Effectiveness

**Created and Recommended by the
Advisory Panel on the
Subject Matter Preparation of Elementary Teachers
(1986-88)**



**Adopted and Implemented by the
Commission on Teacher Credentialing
State of California
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**The mission of the
Commission on Teacher Credentialing
is to maintain and enhance quality
while encouraging innovation and creativity
in the preparation and assessment . . .
of professional educators
for California's schools**

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State of California

Pete Wilson, Governor

1996

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Foreword

On September 19, 1987, Assembly Bill 1759 was signed into law. This bill by Assemblyman Steve Clute revised the coursework requirement for Elementary Subject Matter Programs. The law also authorized the Commission on Teacher Credentialing to establish and implement standards for the evaluation and approval of these programs. This report describes how the Commission developed the Standards, presents the Standards and Factors to Consider adopted by the Commission, and describes the process for approval of Elementary Subject Matter Programs.

More than 70 programs at California colleges and universities have been approved based on the Standards of Program Quality and Effectiveness contained in this booklet.

This booklet has been updated to reflect changes in Commission policy and practices in the past eight years. One of the changes is in the use of the term "waiver". This term is used by the Commission to pertain to the waiving or postponing of specific sections of the Education Code pertaining to credential requirements. To reflect this, the name of this book has been changed. Although the substance of the individual Standards of Program Quality have not been changed, the wording of the standards has been updated and adjusted to be consistent with the other subject matter standards.

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Section 1

Introduction



Section 1

Introduction

The initial years of schooling influence the aspirations and achievements of all people. Early encounters with school subjects shape each child's subsequent academic successes and shortcomings. Interactions and relationships with teachers and classmates affect each young person's social growth and development. Communication skills, reasoning ability, physical capabilities, and personal character are also influenced by teaching and learning in elementary schools. The quality and effectiveness of elementary education are, therefore, of paramount importance to the public, and to education policy makers who serve public interests.

In most elementary school classrooms, one teacher is responsible for all (or nearly all) subjects of the curriculum. In some school districts, specialist teachers are still employed to move from classroom to classroom to teach particular subjects such as art, music, or physical education. The number of elementary specialist teachers has been declining in recent years, however, which has broadened the range of subjects that some elementary classroom teachers are responsible to teach. Even where specialist teachers are employed, elementary classroom teachers are expected to teach many subjects daily or weekly.

Classrooms in which one teacher is responsible for all (or nearly all) subjects are called "self-contained classrooms." In kindergarten and grades one through three, self-contained classrooms are universal, and they are extremely widespread in grades four through six. Some school districts continue to utilize self-contained classrooms in grades seven and eight. In October 1994 there were approximately 107,000 self-contained classrooms in California public schools.

Middle Schools have become a major way of organizing schools for early adolescents in California. The Middle Schools are organized to use a variety of classroom organizational structures including self-contained, core, and departmentalized classrooms. Most teachers currently teaching in middle schools hold credentials that authorize service in self-contained classrooms. The revisions in elementary subject matter preparation programs, such as adding a depth of study requirement, facilitate assignment into all of the classroom organizational patterns in middle school. In 1989, the Commission recognized the importance of specialized professional preparation of middle school teachers when it adopted the *Emphasis Credential for Middle Level Preparation*.

The primary reason for the widespread use of self-contained classes is the prevailing assumption that young children need to identify with a single teacher who can nurture all contained classroom teachers are expected to teach an enormous range of material, and to achieve a great variety of educational goals. Moreover, people commonly expect elementary school teachers to have an array of virtues and capacities that some "saints" may possess only partially!

The Ryan Act of 1970 established the Multiple Subject Teaching Credential for prospective teachers of self-contained classrooms. Previous laws required elementary teaching candidates to earn General Elementary Teaching Credentials (prior to 1960) or Standard Elementary Teaching Credentials (prior to 1970). Two-thirds of the 107,000 self-contained classrooms are currently staffed by teachers who

hold Multiple Subject Credentials, then this credential is being used by more public school practitioners than any other credential issued by the Commission.

One of the legal requirements for earning the Multiple Subject Credential is verification of subject matter knowledge. According to the Ryan Act, candidates can fulfill this requirement in two ways. First, a prospective elementary teacher can verify subject matter knowledge by passing an exam that encompasses literature and language studies, history and social studies, human development, physical education, mathematics, science, and visual and performing arts.

In 1991 the Commission adopted a new exam to assess the subject matter competence for those who want to teach the self-contained classrooms. The Multiple Subject Assessment for Teachers (MSAT) replaced the General Knowledge Test of the NTE Core Battery. The MSAT contains both content knowledge questions (multiple choice) and content area exercises (short-essay). Based on their professional judgments regarding what elementary teachers should know and based on the requirements of the law, the assessment advisory panel, which included elementary teachers, curriculum specialists, and university educators judged the new exam to be acceptable for use as a certification requirement for elementary teachers in California.

Alternatively, a candidate can qualify for the Multiple Subject Credential by successfully completing an Elementary Subject Matter Program that has been approved by the Commission. The programs that have been approved have used a variety of names and formats in their programs. Most programs are called Liberal Arts or Liberal Studies Programs. Some are called "Diversified Programs". Other programs combine a subject matter program and a major in subjects such as political science, child development or environmental science. Regardless of their title, all programs must consist of a minimum of 84 semester-units of study and have been deemed to meet all Standards of Program Quality.

To administer the second option of the law, the Commission approves "Elementary Subject Matter Programs" in accredited colleges and universities throughout California. These programs are the primary subject of the present report. More than sixty institutions currently offer approved Elementary Subject Matter Programs. The Commission implements its standards by appointing teams of teachers, administrators, university professors, and community members to evaluate preparation programs on the basis of the standards.

The law requires the Commission to review and approve three categories of preparation programs for prospective teachers. Elementary Subject Matter Programs comprise one of these categories. To provide a context in which to consider the role and status of Elementary Subject Matter Programs, the three categories of programs are defined below, and the manner in which the Commission reviews programs in each category is described.

Professional Preparation Programs are the first category of teacher education programs. These programs are offered in departments of education, and include student teaching or other field experiences in public schools. Professional preparation programs require no more than the equivalent of one year of full-time study, because of a statutory limitation. To determine the status of professional preparation programs, the Commission has adopted standards of program quality and effectiveness, which have been drafted and developed in consultation with teachers, administrators, teacher educators, school board members, and parents. These thirty-two standards define levels of quality and effectiveness that the Commission expects

pedagogical preparation programs for prospective elementary and middle school teachers. The Commission implements its standards by appointing teams of teachers, administrators, education professors, and community members to evaluate professional preparation programs on the basis of the standards. For twenty-five years the Commission has considered the evaluation and approval of professional preparation programs for teachers to be among its most significant functions.

Secondary Subject Matter Programs are the second category of teacher education programs. Completion of a Secondary Subject Matter Program or passing the Commission approved examination qualifies the candidate to enter a Single Subject Professional Preparation Program. Secondary Subject Matter Programs are similar to undergraduate majors, because they concentrate on the individual subjects that candidates plan to teach in departmentalized classrooms, which occur predominantly in secondary schools. California law requires each Secondary Subject Matter Program to include a minimum of forty-five semester-units (or the quarter unit equivalent) of study in the subject to be taught, or in closely related fields. Forty-five semester-units are equivalent to one-and-one-half years of full-time study.

In 1989, the Commission authorized the development of Standards of Program Quality and Effectiveness for each single subject credential area. Advisory Panels in each subject area was charged with the task of developing standards of program quality and specifications for examinations and performance assessment that are congruent with each other. In 1992, the recommendations of the advisory panels in English, Mathematics, Science and Social Science were approved. In 1994, Standards and Specifications in Art, Languages other than English, Music and Physical Education were approved. In 1996, Standards and Specifications in Agriculture, Business, Health, Home Economics, and Industrial Technology are scheduled for approval and implementation.

The present report culminates an effort by the Commission to adopt standards of program quality for Elementary Subject Matter Programs, for prospective elementary teachers and to initiate a professional review process for these programs in the future. The following section describes this reform effort by the Commission.

Reform of Elementary Subject Matter Programs

In 1981, the Commission staff reviewed the content of approved Multiple Subjects Waiver Programs. Staff analyzed the 112 programs that existed at 62 colleges and universities at that time. Two primary conclusions about subject matter programs for elementary teachers emerged from that review.

1. There is some congruence between the titles of courses in approved programs and the legally required distribution of studies in those programs, but the congruence might be more apparent than actual because course descriptions are sketchy.
2. The Commission has no evidence that the content of approved subject matter programs is congruent with the subjects that are commonly included in the elementary curriculum, or with the content of the Commission-adopted subject matter exam, or with the knowledge that elementary educators consider essential for prospective classroom teachers to possess.

Disturbed by these findings, the Commission directed the staff to complete a study of subjects that are commonly taught in elementary schools. To determine the degree of congruence between the approved programs, the adopted examination, and the subjects that elementary classroom teachers commonly teach, the staff surveyed

2,000 teachers who were selected randomly from all self-contained classroom teachers in California.

The report of this research was entitled *Subjects Commonly Taught in California Schools: Implications for Teacher Preparation and Certification*. One of its principal conclusions was that improvements in the subject matter preparation of elementary teachers must occur if the effectiveness of the elementary school curriculum is to improve. In September 1985, the Commission discussed and adopted this report and authorized the appointment of an advisory panel to examine the subject matter preparation of elementary teachers and to recommend improvements in that preparation to the Commission.

The Advisory Panel, whose names appear on Page ii discussed the Commission's research, examined the curriculum frameworks and model curriculum standards of the California Department of Education, met with several leading educators, including the Superintendent of Public Instruction, read several reports on elementary curriculum, and discussed official statements by several professional organizations representing teachers of particular subjects. As a result of their deliberations, the Panel submitted a *Report of that Advisory Panel on the Subject Matter Preparation Of Elementary Teachers*. In the report the Panel presented its vision of "the well educated person," offered a set of standards of program quality, recommended several special features for subject matter programs, developed guidelines regarding each subject of preparation, offered one prototype of a model program, and proposed changes in law and regulations related to the subject matter preparation of elementary teachers. In September 1986, the Commission accepted the Panel's report, authorized its distribution, and invited subject matter organizations, professional organizations, school districts, colleges and universities to discuss its contents and express their views to the Commission.

From October 1986, through February 1987, the Commission's staff met with 235 persons who were interested in discussing the Advisory Panel's report. The staff also presented the Panel's recommendations to several organizations and conferences which were attended by 219 persons. All of the discussions and comments regarding the Panel's report were recorded by the staff in a third report to the Commission, entitled *The Subject Matter Preparation of Elementary Teachers: Report of Meetings to Discuss the Advisory Panel Report*.

The Commission discussed this third report in April 1987, and directed the staff to (1) conduct a survey of existing waiver programs for prospective elementary teachers, and (2) distribute the report to more than 600 individuals, including:

- Members of the Commission's Advisory Panel;
- The Superintendent of Public Instruction;
- The Office of the California State University Chancellor;
- The Office of the University of California President;
- Academic Senate Officers in the Public University Systems;
- Academic Vice Presidents in the Three University Systems;
- All Deans of Education and Directors of Teacher Education;
- County and School District Superintendents;
- Director, California Post secondary Education Commission;
- Managers of State Department of Education Curriculum Units;
- All persons who attended one of the regional meetings; and
- All persons who requested a copy of the report.

From April to July of 1987, the staff continued to confer with the Advisory Panel, as well as many interested constituents. They suggested changes in the standards, examples, and factors to consider, and commented on the proposed plan to implement the standards. Based on these recommendations, the staff prepared a fourth report, *Elementary Subject Matter Preparation: Survey Results, Revised Standards, and Proposed Implementation Plan*. This report contained an updated analysis of the 109 approved programs at 65 colleges and universities, presented a revised set of standards along with proposed factors to consider for each standard, and offered a proposed implementation plan.

On September 4, 1987, the Commission adopted the implementation plan and authorized distribution of the standards and factors to consider for further discussion. In September 1987, the staff distributed 800 copies of the fourth report to interested constituents, held two regional meetings, which 100 persons attended, to discuss the implementation plan, standards and factors to consider. After the advisory panel reviewed all suggestions for revision of the standards as they deemed necessary. The standards were submitted to the Commission for approval. March 1988, the Commission approved the standards in this document.

In summary, the *Standards of Program Quality for Multiple Subjects Waiver Programs* underwent 14 printed revisions. Hundreds of interested persons contributed to the development of the standards during 1986-87 and 1987-88. The standards were the subject of much discussion and compromise. The level of commitment by all participants speaks to the importance that these people attached to the subject matter preparation of elementary teachers. In 1996, the booklet and its standards were reviewed, updated and adjusted to be consistent with other subject matter standards adopted by the Commission.

Revision of the Laws Related to Elementary Subject Matter Programs

Section 44314 of the Education Code was originally enacted in 1968 to govern the approval of Multiple Subjects Waiver Programs. By 1987, this statute had become out-dated. Section 44314 also did not allow sufficient flexibility to colleges and universities to design imaginative programs, and did not authorize the Commission to review programs based on standards of quality.

The 1968 law required programs to consist of exactly 84 semester-units (or equivalent quarter-units), which were equally divided into four subject areas. The statute also had become out-of-date in relating to the elementary school curriculum. It omitted some subjects like physical education and earth science that elementary teachers often teach.

As a result of the perceived shortcomings in this statute, the Commission sponsored AB 1759 (Clute) in 1987. With the support of several subject matter organizations, this bill was passed by the Assembly and Senate (including four committees) without one negative vote. On September 19, 1987, Governor Deukmejian signed AB 1759, which became Chapter 832 of the Statutes of 1987.

Education Code Section 44314, as amended in 1987, states:

A "diversified" or "liberal arts" program is any program that has been approved by the commission on the basis of standards adopted by the commission.

- (a) *An approved program shall consist of a minimum of eighty-four (84) semester-units, or equivalent quarter-units, including, but not limited to, language studies, literature, mathematics, science, social science, history, humanities, the arts, physical education, and human development.*
- (b) *The commission shall establish standards for "diversified" or "liberal arts" programs, or equivalent programs that waive the subject matter examination for multiple subjects instruction.*

AB 1759 also requires that the Commission "shall adopt standards and promulgate regulations to implement this act on or before July 1, 1988, after which the Commission shall begin to review and approve diversified or liberal arts programs on the basis of the standards and regulations." The Standards of Program Quality in Section 3 of this report are designed to fulfill the mandate of AB 1759. The complete text of AB 1759 may be found in the Appendix at the end of this report.

In 1990, the statute 44282 (b) related to assessment of multiple subject teachers was amended to read:

A General Subject Matter examination authorizing teaching multiple subjects shall include an examination of the candidate's knowledge of the following areas: language studies, literature, mathematics, science, social studies, history, humanities, the arts, physical education, and human development.

This amendment makes statutes that relate to subject matter programs and assessments congruent.

Section 2

Redesign of Standards of Program Quality for Prospective Multiple Subject Teachers



Section 2

Redesign of Standards of Program Quality For Prospective Multiple Subject Teachers

General Guidelines for the Development of Standards for Subject Matter Programs

When the Commission acted to develop standards for subject matter programs, it set out general guidelines for the development of those standards. Those guidelines appear in italics below and were used by the Commission's advisory panels. The Commission has asked each advisory panel to examine and discuss the California State Frameworks and how they address each subject commonly taught in elementary and middle schools, as well as other state curriculum policies.

Teacher education programs should prepare candidates to teach the public school curriculum effectively. The major themes and emphases of subject matter programs for elementary teachers must be congruent with the major strands and goals of the school curriculum. It is also important for future teachers to be in a position to improve the curriculum based on their knowledge of new developments in the scholarly disciplines, and in response to changes in student populations and community needs. However, it is essential that the Commission's standards emphasize the skills, content and activities that are most commonly taught in public schools.

In California's public schools, *the student population is so diverse that the preparation of educators to teach culturally diverse students cannot be the exclusive responsibility of professional preparation programs in schools of education.* This preparation must begin early in the collegiate experience of prospective teachers. The Commission expects subject matter preparation programs to contribute to this preparation, and asked the Elementary Advisory Panel to recommend an appropriate program standard. The panel concurred with this request and drafted Standard 8 in Section 3 of this handbook.

The curriculum of a teacher education program should be based on an explicit statement of purpose and philosophy. An excellent program also includes student services and policies such as advisement services and admission policies. These components of teacher preparation contribute significantly to its quality; they make the program more than a collection of courses. The Commission asked the Elementary Advisory Panel to include standards related to (a) the philosophy and purpose of an Elementary Subject Matter Program and (b) significant, non-curricular components of teacher preparation, to complement the curriculum standards. Standards 1, 2 and 10 - 12 are consistent with these policies of the Commission. In light of these guidelines, the Elementary Advisory Panel developed a philosophy statement about elementary education and elementary teachers.

A Vision of Elementary Education

The preparation and assessment of elementary teachers should be governed by a vision of the quality of life in elementary schools and classrooms. Above all, these schools and classrooms must be interesting environments that tap children's curiosity and whet their appetite to learn and grow. They must be settings in which

teachers and students participate in all aspects of learning; where teachers continue to learn along with their students.

The elementary school experience should be the outset of a lifetime of learning for each child. For this reason, the elementary curriculum must be broad in scope and multidisciplinary in nature. Each subject of this curriculum should contribute to the fundamental education of young children. Relationships among the subjects should be clearly identified and defined so the education of children is complete and cohesive.

In elementary classrooms, children should experience the best writers and writing. The curriculum should include great literature by and about men, women, boys and girls of many cultures, occupations and regions. Meanwhile, children should experience opportunities to express ideas in writing. Indeed, opportunities to read and write should occur throughout the curriculum.

Young children should come to realize what mathematics is and how it can be used. They need opportunities to manipulate objects, solve problems, and draw on their own experiences as they learn to count, sort, and compute. The curriculum should emphasize conceptual understanding and the mastery of rules and operations. Above all, mathematics should be engaging, challenging and enjoyable in elementary schools.

Elementary students should also develop an understanding of how the human world fits together. They need to investigate fundamental processes of human society, government, history, and economics. Future citizens of a democratic republic must master fundamental activities such as observing, explaining, and applying concepts and information. Moreover, personal values develop in the schools of any community; elementary schools should have an explicit role in shaping the character and ethics of all young people.

Exploration and discovery should also occur as children experience their natural environment and the scientific study of it. During the years in which children wonder why things are as they are, they should use their senses and minds to frame questions and conceive explanations for physical and biological events. Relationships between humans and the surrounding universe must also be examined and understood.

Elementary schools should provide many opportunities for all children to express themselves in music, drama, dance and the visual arts. Equally important are experiences that shape each child's aesthetic knowledge, awareness and appreciation. The elementary arts curriculum should initiate a lifelong critical sensitivity to aesthetic elements of the general environment such as color, tone, role, movement, and composition.

During the years of energetic growth, children must experience physical activities that sustain and foster their fitness and wellness. They should explore and extend the limits of their strength, agility and stamina. In the course of their physical education, they must learn to cooperate and compete, negotiate rules and disputes, and enjoy the results of physical effort.

Individually and collectively, all elements of the elementary curriculum must be educational in the most fundamental sense. Each school's curriculum must be designed and constructed to enable children to become educated adults, literate citizens and productive members of their communities. Different curricula can be effective, but each curriculum must reflect an image of how children become

educated persons. Different schools can be effective, but the teachers in each school must be educated adults whose preparation itself reflects a vision of what elementary schools and classrooms are for.

Subject Matter Preparation: The Well-Educated Teacher

The Advisory Panel stressed that the ultimate goal of an Elementary Subject Matter Program is to develop a broad understanding of the world and its structure and dynamics. Prospective elementary teachers need solid subject knowledge as a foundation for their teaching. Their education needs to stress the importance of ideas and discover how the many forms of human inquiry coexist and cohere with each other to yield the rich fabric of human knowledge.

Research on effective schools and teachers has made a very strong case for the importance of a strong sense of efficacy in teachers. The belief by the teacher that he or she can make a difference even with the most difficult or unmotivated students has been highly correlated with the improved student performance. The Advisory Panel believed that a sense of efficacy begins with a belief by the teacher that they have a strong background in the subjects they are asked to teach.

In addition to content knowledge, the candidates in an Elementary Subject Matter Program need to understand the ethical dimensions of human life. They examine their own lives and values and ponder the world in which they live. More than being knowledgeable about any particular subject, well-educated teachers possess characteristics such as compassion, empathy, enthusiasm, curiosity, patience, and humor. Being reflective, contemplative and willing to wrestle with ideas may be more important than being unusually intelligent.

The Advisory Panel felt that candidates must know and understand the subjects of the elementary curriculum with considerable breadth and depth. A solid base of subject matter knowledge is necessary as they make professional decisions about how to transform their own knowledge and make it understandable to children.

Well-educated teachers exercise professional judgment as they analyze situations, make decisions and resolve problems. They assess circumstances and issues confidently, but are willing to consider alternative perspectives. They skillfully make sense out of complexity, and are able to accommodate old ideas in the face of new information.

Finally, the Advisory Panel cited the importance of being eager, involved, and lifelong learners. It felt that perhaps the most crucial ingredient in an educated teacher's character is excitement about knowledge. In January 1985, Albert Shanker expressed this realization in an address to the National Press Club entitled A Call for Professionalism.

"... even at the earliest grades, the motivation of a teacher to teach a child to read could not be very great if the teacher has not personally experienced the joy of reading great books. Motivation in teaching the elements of arithmetic could not be very great if at some point the teacher has not experienced the power of that knowledge."

Potential Impact of This Reform Effort

When the Commission initiated the present reform effort, one of the most important goals was to achieve a better alignment among the components of elementary education. Among these components are:

1. The statutes related to the subjects of study in elementary schools;
2. The subjects actually taught in elementary schools;
3. The assessment of student competence in public schools;
4. The university curriculum for prospective teachers;
5. The examination of teachers' subject matter competence; and
6. The expectations of policy makers for teachers and students.

One of the anticipated outcomes of this effort is closer alignment between the curriculum of elementary schools and the subject matter preparation of elementary teachers. An objective of the Commission is to bring the subject matter examination into congruence with the Elementary Subject Matter Programs. One of the first steps in achieving alignment between the program option and the examination option is to set standards that clearly establish the knowledge that candidates are expected to possess.

In the attempt to achieve a better congruence among the components of elementary education, the Commission's staff requested the advice and solicited the cooperation of those who have a stake in the education of children and adolescents. Besides continued consultation with all branches of postsecondary education, the California Department of Education and several subject matter organizations were deeply involved in the deliberations.

The process of setting standards was a constant tug between opposing forces. For example, organizations representing the visual and performing arts wanted the laws and regulations regarding subject matter preparation to require that visual arts, music, and either dance or drama be included in every candidate's elementary subject matter program. On the other hand, university faculty and administrators argued for maximum flexibility in designing programs so they can build high quality programs and place students into courses where exemplary instruction occurs. In the development of the Standards of Program Quality, the Commission's staff attempted to include Standards and Factors to Consider that would appeal to university administrators and faculty, and others that would appeal to advocates of particular subjects. For example, Standard 3 includes elements that were advocated by several groups. The first factor to consider states that one of the criteria to be used by review teams will be the extent to which each program reflects the state curriculum frameworks, and the seventh factor to consider refers to elements that are in the Visual and Performing Arts Framework. On the other hand, Standard 3 does not require that specific courses or specific subjects be included, to enable universities to design programs based on their vision of the well-educated person and the strengths of their faculty.

Having adopted the Standards of Program Quality in Section 3, the Commission must assure that Elementary Subject Matter Programs include coursework in the arts, as required by Education Code 44314, and ensure that each program meets the twelve standards. How an institution meets those standards, and which specific courses are selected either as requirements or as electives, are the prerogatives of the university.

The visual and performing arts are very important subjects; as are the subjects advocated by organizations that represent science, mathematics, reading, social studies, physical education and foreign language teachers. However, if the Commission prescribes the courses that are proposed by the subject matter organizations, there would be little room for electives in each candidate's program, and little flexibility for an institution to select the most challenging curriculum for its candidates. In fact, if the Commission adopted, *carte blanche*, the recommendations of all of the national subject matter organizations, Elementary Subject Matter Programs would be nearly six years long.

The standards in Section 3 require the faculties of most institutions to make at least minor changes in their Elementary Subject Matter Programs. In some cases the programs made major changes. The coursework requirements in AB 1759 requires most institutions add new courses or adapt existing courses. For example, information that was gathered during the Spring of 1987 indicated that less than 20% of the current programs have a physical education requirement. Only 25% of the programs had a humanities requirement. Coursework in both of these subjects are required by Education Code 44314.

Based on the recommendations of hundreds of persons who assisted the Commission in this effort, the Standards of Program Quality require certain elements to be included in every program: careful advisement, effective coordination, early field experiences, and systematic assessment of candidates. Many quality programs already include some or all of these elements. In other programs, these elements need to be improved or developed. For example, Standard 7 requires field experiences for all Elementary Subject Matter Program candidates. The placement of candidates and the coordination of field activities require added staff time in many cases. Standard 11 requires more candidate advisement than some programs had offered. Standard 12 requires an assessment of the subject matter competence of all candidates. Finally, Standard 10 requires effective coordination of all aspects of the program. The Advisory Panel and the Commission believe that increased attention to those elements that assure quality subject matter preparation for elementary teachers are worth the investment.

Section 3

Standards of Program Quality for Elementary Subject Matter Programs



Section 3

Standards of Program Quality for Elementary Subject Matter Programs

Preamble

Candidates for the Multiple Subjects Teaching Credential can verify their subject matter competence in two ways. Under state laws, they can pass a subject matter examination that has been adopted by the Commission on Teacher Credentialing. Alternatively, they can complete a subject matter preparation program that has been approved by the Commission. To be approved by the Commission, a subject matter preparation program must satisfy each standard of program quality in this section. To receive initial program approval by the Commission, each institution must present an explanation of how each standard is met. On a periodic basis, the Commission reviews each approved program to evaluate the evidence provided by the institution that each standard is being achieved.

Upon completion of an Elementary Subject Matter Program, candidates should know the subjects that are commonly taught in public elementary schools, as those subjects are reflected in the State's Curriculum Frameworks. The Standards for Elementary Subject Matter Programs do not include a specific number of required credits or units in any discipline. The standards do identify certain themes and subjects that must be included in every program. The specific courses, their content, and their unit values are determined by each institution of higher education.

Because prospective elementary teachers must possess a working knowledge of a broad range of subjects, coursework in Elementary Subject Matter Programs must be wide-ranging. Prospective elementary teachers also benefit from depth of knowledge. As a result of the need for breadth and depth, an Elementary Subject Matter Program may consume most of the credit hours in an undergraduate education. Education Code Section 44314, as amended in 1987, requires that each program consist of a minimum of 84 semester-units or the equivalent. Given this legal minimum, the numbers of credit units may vary considerably from one program to another. Regardless of their length, programs that satisfy the legal requirements and the Commission's Standards of Program Quality will be approved.

At some institutions, general education courses have not been included in Elementary Subject Matter Programs in the past. The Commission believes that courses that meet an institution's general education requirement for baccalaureate degrees may be appropriate for inclusion in Elementary Subject Matter Programs, if the courses are consistent with the Standards of Program Quality.

Moreover, the content and quality of the courses in a program are more important than the placement of those courses in various departments at the institution. The Commission approves Elementary Subject Matter Programs on the basis of the Standards of Program Quality. Approved programs may include coursework in any college, school, department or unit, including (but not limited to) arts and sciences, behavioral sciences, education, engineering, humanities, and letters and sciences.

The statutory authority of the Commission relates to programs that provide the subject matter foundation that is required for teacher certification. Colleges and universities govern academic degree programs, including undergraduate majors. Each institution decides whether to grant baccalaureate degrees to students who complete its approved Elementary Subject Matter Program. Colleges and Universities voluntarily submit their subject matter programs for approval. No statute or policy requires an institution to higher education to offer a subject matter program.

Although approved Elementary Subject Matter Programs meet the requirements for the subject matter preparation of elementary teachers, in general the coursework in these programs should not be designed solely for prospective teachers. Students who are preparing for a variety of careers enrich the education of all who enroll in programs of subject matter preparation for teachers. A diverse student body fosters openness to different perspectives and respect for human similarities and differences. For these reasons, the Commission encourages institutions to design Elementary Subject Matter Programs so students with other professional goals may be interested in pursuing them, along with future elementary teachers.

All coursework in a Elementary Subject Matter Program must predominantly be explorations of specific subject matter. Professional education courses should not be included as part of subject matter programs, but may be offered concurrently with coursework in these programs. The Commission defines professional education courses as courses in which:

- a. candidates predominantly study and practice ways of teaching classes and organizing curricula in elementary and secondary schools, or
- b. candidates predominantly study concepts, information or principles that are presented as bases for effective school practices and that are presented especially for candidates to learn as prospective teachers.

In some subjects, such as visual arts, performing arts, and physical education, how candidates learn to do particular activities or skills are critical elements in learning the subject, and are therefore considered to be aspects of subject matter preparation instead of professional preparation. Practical applications of subject matter are strongly encouraged in programs.

Courses in professional education, as defined above, must be included within the professional preparation courses regardless of what departments are responsible for the courses. Courses in professional education should be included in professional preparation programs when institutions propose such programs for initial approval, and when evaluation teams visit such programs for continued approval by the Commission.

Finally, institutions need not organize their Elementary Subject Matter Programs along traditional disciplinary lines. The courses in an approved program could be grouped under headings such as "The Individual and Society," or "The Natural World." Similarly, an entire program could have an underlying theme such as environmental studies or Latin American studies.

Definitions of Key Terms

Program Review

Program review is the process that is used by the Commission to confirm that academic programs in postsecondary institutions satisfy the standards of the Commission. The review process has two components: initial program approval and periodic program evaluation.

Professional Preparation Programs

Professional preparation programs provide skills and knowledge in professional education that are needed by candidates for teaching or services credentials. These programs include coursework in pedagogy, methodology and educational foundations, as well as field experiences in which candidates perform the major responsibilities that are authorized by credentials. Instruction and field experiences in professional preparation programs should provide a theoretical background, a conceptual framework, skills and knowledge, along with opportunities to apply and practice the skills and knowledge in public schools. The Commission has published its standards for professional preparation programs in other documents. The present document relates to subject matter preparation programs, which are defined next.

Subject Matter Preparation Programs

Subject matter preparation programs educate candidates in the subjects that are commonly taught in California schools. Candidates for teaching credentials may demonstrate subject matter competence by completing an approved subject matter preparation program or by passing an approved subject matter examination that the Commission has adopted. There are two kinds of subject matter preparation programs: Secondary Subject Matter Programs and Elementary Subject Matter Programs. The former are for candidates for single subject teaching credentials, which authorize teaching in departmentalized classes. Elementary Subject Matter Programs are for candidates for Multiple Subject Teaching Credentials, which authorize instruction in self-contained classes. The Commission has published its standards for Secondary Subject Matter Programs in other documents. The present document relates to Elementary Subject Matter Programs, which are defined more fully below.

Elementary Subject Matter Programs

Elementary Subject Matter Programs are programs that are alternatives to standardized examination that the Commission has adopted for candidates for Multiple Subject Credentials. Education Code Section 44314, as amended in 1987, requires that Elementary Subject Matter Programs (1) meet the Commission's standards of program quality, (2) be at least 84 semester-units (or equivalent quarter-units), and (3) include coursework in language, literature, mathematics, science, social science, history, the arts, humanities, physical education and human development.

The Education Code refers to Elementary Subject Matter Programs as Diversified Liberal Arts Programs. Some institutions have adopted this title for their programs. Other institutions have adopted other titles. The titles of programs are determined by

postsecondary institutions. The Commission determines whether programs should be approved on the basis of the Commission's standards, regardless of the programs' titles.

Standards

A “standard” is a statement of program quality that must be fulfilled for initial or continued approval of a subject matter program by the Commission. In each standard, the Commission has described an acceptable level of quality in a significant aspect of elementary teacher preparation. The Commission determines whether a program satisfies a standard on the basis of an intensive review of all available information related to the standard by a review panel whose members (1) have expertise in elementary teacher preparation, and the subjects commonly taught in elementary schools, (2) have been trained in the consistent application of the standards, and (3) submit a recommendation to the Commission regarding program approval.

The Commission’s adopted *Standards of Program Quality and Effectiveness for Elementary Subject Matter Programs* begin on page 19 of this handbook. The Commission’s authority to establish and implement the standards derives from Section 44259 (b) (5) of the California Education Code.

Concentration: Depth of Study

A concentration is a sequence of courses that adds depth to a candidate's preparation in one subject or area of study. Concentrations are the subject of Standard 4 in this document. The courses that comprise a candidate's concentration must be coherently related to each other, but need not be in the same academic department.

Rationale

For each standard of program quality, the Commission provides a rationale, which states the reasons for adopting the standard, and suggests the scope of the standard.

Factors to Consider (Formerly Quality Indicators)

“Factors to Consider” guide program review panels in judging the quality of a program in relation to a standard. Within the scope of a standard, each factor defines a dimension along which programs vary in quality. The factors identify the dimensions of program quality that the Commission considers to be important. To enable a program review panel to understand a standard fully, a college or university may identify additional quality factors, and may show how the program fulfills these added indicators of quality. In determining whether a program fulfills a given standard, the Commission expects the review panel to consider all of the related quality factors for a standard, excellence on one factor compensates for less attention to another indicator by the institution except in Standard 3 where all factors must be addressed because each factor reflects the subjects required by Education Code Section 44314.

Standards of Program Quality and Effectiveness

Category I: Content of the Program

Standard I: Program Philosophy and Purpose

Each subject matter program is based on a conception of a well-educated person. Throughout the program, there is a focus on significant ideas, structures and values within the various disciplines. Ethical, moral and practical implications of significant ideas are also examined.

Rationale for Standard 1

A program that is based explicitly on a vision of a well-educated person is most likely to be effective in achieving that vision. The knowledge that is most worth learning and knowing consists of the ideas, structures and values that are most significant to the disciplines of collegiate study. By giving emphasis to the ethical, moral and practical implications of ideas, programs are most vital and interesting to contemporary students.

Factors to Consider

When reviewers judge whether a program meets this Standard, the Commission expects them to consider the extent to which:

- The institution articulates and the program represents a philosophy or a vision of the kind of education that each candidate is expected to experience.
- Coursework throughout the program emphasizes the study of broad concepts and principles that encompass and illuminate extensive domains of human learning.
- Coursework in the program reflects an "intellectual scaffolding" and contains the critical structures, intellectual foundations, ideas, and elements of the disciplines being investigated.
- Candidates encounter and learn to recognize the values and attitudes that drive the disciplines being studied. (Examples of such values and attitudes include respect for evidence, openness to alternatives, tolerance for divergence, and recognition of the intrinsic importance of knowledge.)
- Candidates study and confront ethical and moral issues related to the subjects of study, and attempt to resolve such issues.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 2: Character of Content

Each subject matter program is academically rigorous and intellectually stimulating. Throughout the program, candidates are required to read major works; analyze, evaluate and apply ideas; express themselves skillfully; and utilize processes of inquiry.

Rationale for Standard 2

The goal of each program is to produce well-educated persons who exercise sound judgment as they analyze situations, make decisions, and resolve problems. The quality and effectiveness of the program depends on opportunities for candidates to be challenged intellectually, to experience the range of human knowledge, and to utilize effective communication skills, and to make sense out of complexity.

Factors to Consider

When reviewers judge whether a program meets this Standard, the Commission expects them to consider the extent to which:

- Candidates are required to engage in rigorous studies, and are expected to master content that challenges their intellectual capacities.
- Candidates encounter academic tasks and cognitive activities that are designed to motivate candidates and stimulate their interest in the subjects to be learned.
- Candidates are expected to study writings that have had a substantial impact in one or more disciplines.
- Candidates are required to write or speak articulately and (in appropriate areas) to express themselves creatively through non-verbal means.
- Candidates have opportunities to generalize, infer, compare and contrast, make hypotheses, organize information and interpret its implications, write analytically, and use research evidence, intellectual reasoning, and personal judgment.
- Candidates examine the actual consequences of ideas that have changed the human condition.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 3. Required Subjects of Study

Each subject matter program fosters knowledge and understanding of the subjects that are commonly taught in elementary schools. Each program includes study of each subject that is required by Education Code Section 44314: language, literature, mathematics, science, social science, history, humanities, the arts, physical education, and human development.

Rationale for Standard 3

The dominant pattern of instruction in California elementary schools is the self-contained classroom in which one teacher is responsible for instruction in all or nearly all of the subjects of the curriculum. In an elementary classroom, the progress of students in learning the subjects of the curriculum depends greatly on the teacher's knowledge of those subjects. The curriculum of elementary education in California is best reflected by the state Curriculum Frameworks and Model Curriculum Guides that have been adopted by the State Board of Education and published by the California Department of Education. Although the Elementary Subject Matter Program curriculum must encompass the subjects that are commonly taught in elementary schools, the collegiate curriculum examines those subjects at levels of greater depth and complexity. These subject matter programs not only prepare teachers for self-contained but also core classes in middle schools, and therefore, programs should have sufficient breadth and depth to prepare teachers for middle school classrooms.

The subjects identified in the Factors to Consider for Standard 3 (below) are provided as a guide to teams that review or evaluate Elementary Subject Matter Programs. The coursework in each individual candidate's program must include all of the subjects identified in Education Code Section 44314, and therefore, each factor must be addressed. Although all candidates should study the subjects that are commonly taught in elementary schools, a program should also be based on the institution's conception of a well-educated person. Each institution has great latitude in determining which studies are necessary to realize the vision of a well-educated person.

Although the first Factor to Consider anticipates that the program's curriculum reflects or builds upon the State Curriculum Frameworks and Model Curriculum Guides, the program curriculum is not expected to be aligned with all aspects of the state frameworks and guides. The term "major themes and emphases" in the Factors to Consider is intended to be a generic reference to the major organizers of the state frameworks and guides, rather than a reference to any particular themes or curricular headings.

In the remaining Factors to Consider, the Commission has grouped the subjects of study in categories that are identified in Education Code Section 44314. For consistency and clarity, these factors list the potential subject subsumed in each of the subjects required by Education Code 44314. These categories may be modified at the discretion of each postsecondary institution. For example, health could be studied as part of science or human development, instead of within physical education; drama could be part of language studies instead of the arts; and foreign language

could be studied as part of the humanities instead of language studies. Similarly, an institution might choose to add a Factor to Consider that separates the study of history from the social sciences, instead of combining them as the Commission has done. In all cases, the organization of a program's curriculum should be based on the institution's vision of a well-educated person.

Factors to Consider

When reviewers judge whether a program meets this Standard, the Commission expects them to consider the extent to which:

- The program's curriculum reflects or builds on the major themes and emphases of all adopted State Curriculum Frameworks and Model Curriculum Guides for elementary schools.
- The study of language includes such areas as literature, composition, foreign language, language acquisition, and/or speech, and is conceived as an integrated process for developing and mastering communication skills.
- The study of mathematics develops or builds upon knowledge of fundamental mathematical concepts and relationships, and problem solving abilities.
- The study of science includes such areas as biological science, earth and space science, and/or physical science, and includes examination and use of scientific methods.
- The study of history and the social sciences includes such areas as United States history and government, world history and culture, geography, economics, political science, psychology, sociology, and/or anthropology.
- The study of humanities includes such areas as philosophy, ethics, logic, classics, comparative literature, and/or comparative arts.
- The study of the visual and performing arts includes such areas as art, music, drama and/or dance, and includes production, history, aesthetics, and criticism.
- The study of physical education includes such areas as health and wellness, physical fitness, and/or movement skills.
- The study of human development includes such areas as intellectual, social, physical, emotional and/or moral development during childhood and adolescence.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 4. Depth of Study

In order to add depth to his or her knowledge of a subject, each candidate completes a concentration or a major in a discipline or an area of study. Each program offers a set of concentrations and/or majors, from which candidates choose. Each concentration or major relates to a subject area that is commonly taught in elementary or middle schools (as identified in Standard 3) or a closely related area of study. Each concentration consists of a minimum of twelve semester units in courses that are coherently related to each other. Unless otherwise justified, the courses in a concentration are upper division courses. No course that is required of all candidates in the program may be included in any candidate's concentration.

Rationale for Standard 4

California elementary schools will be well served if each prospective teacher achieves a depth of understanding in a particular area or discipline. If each elementary school includes teachers who have completed extensive studies in particular areas, the schools could draw on distinct, individual strengths as teachers plan curriculum, participate in staff development, and organize themselves to provide an effective educational program. An area of concentration is particularly useful for teachers working in middle schools because teachers frequently work with students in more than self-contained setting such as core and departmentalized classrooms. Depth of study in a particular content area facilitates the assignment of teachers in those schools who wish to utilize more specialized curriculum format.

Factors to Consider

When reviewers judge whether a program meets this Standard, the Commission expects them to consider the extent to which:

- The program offers concentrations or majors that relate to the major subjects of the elementary school curriculum (as these are identified in Standard 3).
- Each concentration fosters understanding of the structure of knowledge and how it is generated in the area of concentration.
- Each candidate who has a concentration completes a significant activity such as an independent study, production, performance, or project.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Category II: Essential Features of Program Quality

Standard 5: Varied Teaching Strategies

Each program includes coursework that utilizes a variety of teaching strategies. In the course of the program, each candidate applies academic learning to specific situations, problems and issues.

Rationale for Standard 5

Among the most powerful models of teaching for prospective elementary teachers are the professors they encounter in college classrooms. Course instructors who use varied teaching strategies that involve and challenge their students make coursework more interesting and understandable, and serve as examples to prospective teachers. Among the most effective teaching styles that candidates encounter are ones that lead them to utilize academic content knowledge in specific situations, to apply it to actual problems, and to relate it to significant issues.

Factors to Consider

When reviewers judge whether a program meets this Standard, the Commission expects them to consider the extent to which:

- Candidates participate in demonstrations, discussions, simulations, lectures and other effective and appropriate approaches to teaching, during coursework in the program.
- Candidates encounter many kinds of out-of-class assignments during the program's coursework.
- Practical applications of academic content are significant elements of courses in several disciplines.
- The program includes coursework that utilizes varied approaches to the measurement and evaluation of student attainments and achievements.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 6. Integrative Study

Each program includes integrative study of two or more disciplines. Students examine relationships between the disciplines, synthesize their major themes, and compare their forms of inquiry.

Rationale for Standard 6

In a subject matter program that includes many different areas of study, students should confront intellectual issues that transcend individual disciplines. To become well-educated persons, candidates should examine relationships, similarities and differences among subjects. Integrative courses or other experiences enable candidates to synthesize the seemingly disparate threads of previously completed courses. Knowledge of relationships among disciplines is especially important for elementary teachers, who must be able to integrate several subjects in order to teach a comprehensive curriculum in each elementary school classroom.

Factors to Consider

When reviewers judge whether a program meets this Standard, the Commission expects them to consider the extent to which:

- Candidates have opportunities for integrative study that encompasses more than one of the subjects that are commonly taught in self-contained classrooms.
- Several options for integrative study are available to candidates in the program.
- Candidates analyze and compare the most significant themes, concepts, structures, ethical principles and forms of inquiry from the disciplines that are studied.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 7. Field Experiences

Each subject matter program offers opportunities for field experiences in schools and other public service agencies and institutions. During the program, each prospective teacher completes at least one significant experience in a school setting. Each experience is accompanied by discussions in which candidates analyze, compare and evaluate what they observe and learn in relation to their academic studies in the program.

Rationale for Standard 7

Students need a variety of contemporary experiences to link theory and practice, knowledge and application. The purpose of field experiences in Elementary Subject Matter Programs is to lead all students in the program to explore ways in which content knowledge is used in varied institutional settings. Prospective elementary teachers should work with children and youth in specific content areas. In addition to schools, other public service agencies and institutions are good settings for experiential learning that should be integrated with the rest of the Elementary Subject Matter Program. Field experiences are beneficial ways of making collegiate instruction more practical as well as academic. Field experiences help candidates to determine whether public service careers are suitable for them before they expend time and money in pursuit of any particular career.

Factors to Consider

When reviewers judge whether a program meets this Standard, the Commission expects them to consider the extent to which:

- The program offers opportunities for significant experiences in a variety of school settings and other public service agencies and institutions.
- The accompanying discussions relate each candidate's field experience(s) to academic coursework in the program.
- Candidates analyze, evaluate and compare their experiences with those of other students in the program.
- Candidates learn about a variety of settings through visitations or discussions or both.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 8. Diverse Perspectives Relating to Ethnicity, Gender, Culture, and Individuals with Disabilities

The program coursework includes knowledge, understanding and appreciation of the perspectives and contributions of diverse ethnic, gender, cultural groups, and perspectives on individuals with disabilities.

Rationale for Standard 8

Prospective elementary teachers must have a thorough understanding of the diverse ethnic, gender, cultural, and ability and disability groups in California, and the ways in which race, sex, and ability and disability affect our society. As citizens in a multicultural nation, all candidates in Elementary Subject Matter Programs must develop openness to different perspectives, and respect for human similarities and differences.

Factors to Consider

When reviewers judge whether a program meets this Standard, the Commission expects them to consider the extent to which:

- Issues related to ethnicity, gender, culture, and disabilities are examined in program courses such as courses in history, social science, language, humanities, literature, science, the arts, physical education, and human development.
- The contributions and perspectives of diverse ethnic, gender, cultural, and disability groups are included in the program.
- The program addresses ways in which the study and teaching of various disciplines affect different ethnic, gender, cultural, and disability groups.
- Students in the program examine how race sex, and ability and disability affect our society.
- Studies of different ethnic, gender, cultural, and disability groups are designed, planned and evaluated as key course elements by course instructors.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 9. Technology

Each subject matter program includes examination and utilization of technology that is appropriate to disciplines in the program.

Rationale for Standard 9

Technology plays an increasingly significant role in communications, transportation, commerce, the arts and recreation. In schools, many forms of technology have become the subjects and tools of instruction. In their professional pursuits, prospective elementary teachers must be able to use several forms of technology without anxiety or fear. Candidates need to understand what forms of technology are appropriate, how different technologies can and should be used, and the social implications of various technologies in the contemporary world.

Factors to Consider

When reviewers judge whether a program meets this Standard, the Commission expects them to consider the extent to which:

- Computers and other technologies are used as tools of instruction in the program.
- Uses of appropriate technologies are planned and evaluated as significant elements of coursework in the program.
- Experiences with technological tools are designed to contribute to candidates' sense of efficacy regarding those tools.
- The program includes study of the roles of technology in society, and of ethical issues surrounding the impact of technology on society.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Category III: Coordination and Assessment of the Program

Standard 10: Coordination of the Program

Each subject matter program is coordinated effectively by one or more persons who are responsible for program planning, implementation and review.

Rationale for Standard 10

A Elementary Subject Matter Program brings together many disciplines and departments. The success of the program depends partly on the quality and effectiveness of its leadership. It is important that a specific person or persons be responsible for developing and coordinating the elements of the program, including advisement, field experiences, and the assessment of individual candidates. Each program is planned thoughtfully implemented conscientiously, and reviewed periodically by designated individuals.

Factors to Consider

When reviewers judge whether a program meets this Standard, the Commission expects them to consider the extent to which:

- There is effective communication and coordination among the academic program faculty; and between the faculty and local school personnel, local community colleges, and the professional education faculty.
- One or more persons are responsible for overseeing and assuring the effectiveness of student advisement and assessment in the program (refer to Standards 11 and 12), and for program review and development.
- The institution ensures that a faculty who teach courses in the program have backgrounds of advanced study or professional experience and currency in the areas they teach.
- Sufficient time and resources are allocated for responsible faculty and/or staff members to coordinate all aspects of the program.
- The program has a comprehensive, ongoing system of review and development that leads to continuing improvements in the program.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 11. Candidate Advisement

Each program has an effective system of candidate advisement, and facilitates advisement with postsecondary feeder institutions. Designated members of the faculty or staff inform students of the program's requirements, standards, and procedures; advise them regularly regarding their academic development and career plans; and facilitate their transition to and from other institutions, including community colleges.

Rationale for Standard 11

It is important that each candidate have access to information about all the options that are available in a program. One element of effective advisement is assuring that candidates understand the subject matter requirements early in their college years. Since as many as seventy percent of the candidates in some Elementary Subject Matter Programs have transferred from community colleges, it is important that community college students and advisors know which courses are equivalent to the courses in approved waiver programs.

Factors to Consider

When reviewers judge whether a program meets this Standard, the Commission expects them to consider the extent to which:

- Candidates in the program have access to (a) clear information about the program's requirements, standards, options, and procedures; (b) current information about the field experiences, concentrations and/or majors that they may pursue in the program; and (c) advice regarding their academic progress and career plans.
- The institution develops articulation agreements with selected community colleges which facilitate advisement by feeder colleges as well as transfer to the four-year institution.
- The institution gives time and support to faculty members who advise candidates in the program.
- Advisor availability in the program compares with advisor availability in other academic departments on campus.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Standard 12. Assessment of Subject Matter Competence

The program includes a summative assessment of the subject matter competence of each candidate in language, literature, mathematics, science, social science, history, humanities, the arts, physical education, and human development.

Rationale for Standard 12

Prior to admission into student teaching in a professional preparation program, individuals who are responsible for a Elementary Subject Matter Program should verify that each candidate possesses college-level knowledge and competence in the subjects that are commonly taught in elementary schools. Information about candidate knowledge and competence that is generated by the assessment of candidates in courses may be considered as part of the summative assessment that occurs at the conclusion of the program.

Factors to Consider

When reviewers judge whether a program meets this Standard, the Commission expects them to consider the extent to which:

- The summative assessment is aligned with the required subjects in the program.
- The assessment uses a variety of assessment methods such as:
 - Candidate performances;
 - Candidate presentations;
 - Candidate projects;
 - Field experience logs or journals;
 - Samples of candidates' work;
 - Interviews with candidates;
 - Oral examinations; and
 - Written examinations.
- The program staff makes and retains thorough records regarding each candidate's performance in the assessment.
- There is a systematic procedure for the assessment of candidates, including an appeal process.
- The program staff periodically evaluates the quality, fairness and effectiveness of its assessment process, including its consistency with the program's vision of a well-educated person.
- The program has other qualities related to this standard that are brought to the reviewers' attention by the institution.

Section 4

Specifications for the Subject Matter Knowledge and Competence of Prospective Elementary Teachers



Section 4

Specifications for the Subject Matter Knowledge and Competence of Prospective Elementary Teachers

As was mentioned in the first section of this report, there are two ways in which a perspective elementary teacher can demonstrate subject matter competence in California. The first option is the Elementary Subject Matter Program. The second is passage of a Commission approved, standardized, statewide assessment of subject matter competence and knowledge. The statewide assessment option needs to be available to a variety of persons who want to become elementary teachers in California; persons who are educated in other states, but want to teach in California; persons who pursue other degree programs or matriculate from institutions that do not have approved Elementary Subject Matter Programs; and students who decide to become teachers relatively "late" in their college years.

A student who seeks to earn the Multiple Subject Teaching Credential should have basic knowledge of the subjects commonly taught in elementary schools including: literature and language studies; mathematics; visual and performing arts; physical education; history and social studies, science; as well as human development.

To verify that these expectations have been attained, the Commission has developed and adopted a standardized subject matter assessment for elementary (and middle school) teachers, which consists of two sections: a two hour, 120 question multiple choice section to examine content knowledge in the seven content categories, and a three hour assessment using content area exercises (18 short essay questions) to measure knowledge and higher-order thinking skills of prospective elementary school teachers. For the two sections of the Multiple Subject Assessment for Teachers (MSAT), specifications were set by Multiple Subject Assessment Advisory Panel. Their recommendations were analyzed and adopted by the Commission in June, 1992. The specifications identify and illustrate the content knowledge, skills and abilities that students should acquire and develop in a subject matter program for prospective elementary teachers. Content descriptions, reflect the test specifications, in each of the content areas covered by the exam.

Content Descriptions

Representative descriptions of each of the content areas covered by the test are provided below. Within each content area, the approximate percentage of examination questions is shown for each topic in parentheses.

I. Literature and Language Studies

The focus is on literature, language, and components of written and oral communication. Literature includes both expository and narrative texts and the written materials of all disciplines. Language Studies includes the processes of language development and the uses of language in written and oral communication. Questions allow examinees to demonstrate their knowledge and understanding of literature and language as well as their ability to think critically about relevant problems and to apply the principles of the language arts within diverse contexts.

- Literature (35 percent)
 - literary concepts, conventions, terminology
 - assumptions and conventions of primary literary genres, including children's literature
 - social/historical contexts as they relate to literature
 - approaches to reading and interpreting literature
- Language and linguistics (30 percent)
 - basic stages of language development, including factors that enhance or inhibit this development
 - historical and cultural influences on the evolution of standard American English
 - principles of linguistics in analyzing various textual contexts
 - integration of language across disciplines
- Oral and written communication (35 percent)
 - application of communication skills to analysis and production of written text
 - application of communication skills to analysis of oral discourse
 - rhetorical conventions of narration, exposition, reflection, and argumentation
 - retrieval of information from print and non-print sources
 - interpretation of the written reports of research

II. Mathematics

The focus is on the mathematical understandings that elementary school teachers must have, the ability to communicate these understandings, and the ability to solve mathematical problems.

Because the emphasis is on assessing the examinee's ability to reason logically, to use mathematical techniques in problem solving, and to communicate mathematical ideas effectively, examinees are not required to do much computation. Examinees may use non-programmable calculators while taking the test; a basic four-function calculator will be adequate.

The test questions do not require knowledge of advanced-level mathematics vocabulary but may require examinees to relate mathematics to real-life situations. Mathematics is conceptualized as an integrated field; therefore, a single problem may test several mathematical content areas.

Although few technical words are used in the test questions, terms such as area, perimeter, ratio, integer, factor, and prime number are used because it is assumed that these are commonly encountered in the mathematics that all examinees have studied.

- Number sense and numeration (20 percent)
 - understand the meaning/implication of number and number concepts as they relate to problem solving, using cardinal and ordinal numbers, place value, ordering of fractions, decimals, and whole numbers

- Geometry (20 percent)
 - knowledge of relationships in both two and three dimensions
 - ability to draw inferences based on precepts/concepts of parallelism, perpendicularity, congruence and similarity, angle measures and polygons
- Measurement (5 percent)
 - knowledge and application of standard units of both the English and metric systems, nonstandard units, estimation, perimeter, area, volume, mass, weight, angle measure, time, temperature
- Algebraic concepts (10 percent)
 - recognize and apply algebraic concepts and properties
 - describe patterns by writing or identifying a formula
- Number theory (10 percent)
 - problem solving that demonstrates an understanding of prime and composite numbers, divisibility rules, least common multiple, greatest common divisor and set theory
- The real number system and its subsystems (20 percent)
 - solve real-world situational problems
 - work with both standard and alternate algorithms
- Probability and statistics (15 percent)
 - understand the organization, presentation and interpretation of data in various forms
 - recognize valid and invalid inferences
 - solve basic problems
 - make predictions involving probability and statistics

III. Visual and Performing Arts

The focus is on four disciplines that comprise the visual and performing arts: dance, music, drama/theatre, and visual arts. To the extent possible, equal attention is given to each art discipline.

Test questions address aesthetic perception -- seeing both directly and metaphorically; cultural heritage -- knowledge of historical and cultural development that occurs as a result of varying needs and aesthetic points of view; aesthetic valuing -- having a base for making informed aesthetic judgments; and creative expression -- recognizing and analyzing ideas, feelings, personal experiences, and values that are expressed or presented in artworks. To the extent possible, creative expression will permeate each of the other categories.

Questions include visual materials where relevant and appropriate. Question content recognizes the multicultural and multiethnic nature of the arts; emphasizes basic ideas, concepts, and issues in the visual and performing arts, allows an examinee to demonstrate and use skills such as analysis, interpretation, synthesis, and judgment; and may require integration of two or more of the four arts disciplines.

- Aesthetic perception/creative expression (40 percent)
 - basic art elements
 - principles
 - fundamentals
 - vocabulary
- Cultural heritage (40 percent)
 - relate artworks to one another and/or to their artistic, social, historical, cultural, and emotional contexts
 - differentiate among various styles
 - relate aspects of the arts to their geographical origins
- Aesthetic valuing (20 percent)
 - determine aesthetic criteria
 - interpret the meaning of a work of art
 - determine and apply criteria in making judgments works of art

IV. Physical Education

The focus is on knowledge and understanding of the three major classes of activities included in physical education programs: fundamental movements and movement concepts, fitness, and movement forms.

Questions also address subject knowledge in the physical, biological, and social the physical education curriculum; evaluate and interpret the physical characteristics and performances of students in physical education classes; and make decisions about the ongoing conduct of physical education classes and the needs of students in those classes.

- Movement concepts and forms (50 percent)
 - fundamentals/movement concepts: locomotor, nonlocomotor, and manipulative movements and the concepts of space, effort/quality, and relationships
 - fitness: conditioning, skill-related fitness, and health-related fitness
 - movement forms: nontraditional games/sports, traditional individual/team games and sports, tumbling, and gymnastics
- Physical and biological science foundations (40 percent)
 - growth and development: characteristics, phases, stages; sensory-perceptual maturation; individual/cultural variation
 - motor learning: information/attention/interest; feedback
 - exercise physiology: fitness, testing, drug use, nutrition
 - kinesiology: mechanical principles, injury prevention, basic principles of movement
- Social Science foundations (10 percent)
 - social aspects of physical education
 - psychological aspects of physical education

V. Human Development

The focus is on the basic knowledge and skills needed by elementary school teachers to understand and respond to the developmental needs of other students rather than on the subject matter that teachers actually teach.

Questions address basic theories of human development, research in the subject, major developmental perspectives, gathering and using information about children, and issues concerning human diversity and individual differences.

- Implications and applications of theory (20 percent)
 - behavioral development
 - cognitive development
 - social learning
 - psychosocial development
- Implications and applications of research (30 percent)
 - family influences/attachment
 - personality/temperament
 - factors affecting achievement
 - aggression/prosocial behavior
 - intelligence and intellectual development
 - play
 - moral development/character education
 - effects of substance abuse on the unborn child
- Major developmental perspectives (15 percent)
 - continuity versus discontinuity
 - nature versus nurture
 - child-centered versus adult-directed learning
- Gathering and using information (10 percent)
 - formal and informal methods of assessing children
 - ethical issues
- Human diversity (25 percent)
 - questions posed within the content areas delineated above as they pertain to diverse populations

VI. History/Social Studies

Focus is on essential understanding of important historical events and issues and basic social science concepts. Because history and the social sciences are best seen as mutually enriching, most questions will require knowledge of both history and the social sciences.

Since critical thinking skills are integral to essential understandings, most questions will require the exercise of such skills. In many instances, examinees will be asked

to utilize these skills in demonstrating an understanding of original documents, such as maps, charts, graphs, cartoons, and short quotations.

History: all questions in the History/Social Studies area require knowledge of history except for one question that has a nonhistorical perspective.

- United States history (50 percent)
 - Native American civilizations
 - European exploration and colonization
 - the American revolution and the founding of the nation
 - growth of the new republic
 - the Civil War and Reconstruction: causes and consequences
 - industrialization of America
 - World War I: causes and consequences
 - post-World War I America
 - World War II: causes and consequences
 - post-World War II America
- World history (45 percent)
 - prehistory and the development of early civilizations
 - classical civilizations
 - development of world religions
 - feudalism in Japan and Europe
 - Chinese and Indian empires
 - sub-Saharan kingdoms and cultures
 - Islamic civilization
 - civilizations of the Americas
 - rise and expansion of Europe
 - nationalism and imperialism
 - twentieth-century ideologies and conflicts
- Nonhistorical perspective (5 percent)
 - social science questions not posed in historical context

Social Sciences: most questions in the History/Social Studies area require knowledge of social science as well as history. For those questions that require knowledge of both history and social science, the approximate percentages that require knowledge in each social science area are given below.

- Government and politics (20 percent)
 - Political concepts and theories
 - United States political system
- Geography (35 percent)
 - map and globe skills

- physical geography
- cultural geography
- political geography
- economic geography
- regional geography
- Economics (25 percent)
 - basic economic concepts
 - government's role in the economy
- Anthropology and sociology (20 percent)
 - definitions, research methods, techniques of study
 - human culture, social organization
 - how cultures change

VII. Science

Focus is on the ability to demonstrate an understanding of scientific concepts, identifying concepts, identify problems, formulate and test hypotheses, design experiments, analyze and evaluate data, use instruments. Because science is viewed as an integrated field, a single question may assess understanding of several content areas.

- Biology (33-34 percent)
 - cellular biology: biologically important molecules, structure and function of cells and their organelles, energy sources and processes, and genes and gene function
 - biology of organisms: life forms, structure and function of organ systems, and basic principles of heredity
 - ecology, interrelationships in the biosphere: characteristics of ecosystems, energy flow in biological communities, and characteristics of biological communities
 - evolution: evolutionary mechanisms, evolutionary patterns, evidence for evolutionary change, and history of life as related to the geological time-line
- Geoscience (33-34 percent)
 - astronomy: the solar system and planetary systems, stars and galaxies, and cosmology
 - geology: earth materials, internal processes, land forms and external processes, and the history of the Earth and its life forms
 - meteorology: atmospheric composition and structure, atmospheric movement, and weather and climate
 - oceanography: biological, chemical, geological, and physical processes and characteristics
- Physical sciences (33-34 percent)
 - matter: characteristics, structure, and physical and chemical properties

- reactions and interactions: kinetic theory, changes in state, chemical reactions, oxidation and reduction, acids and bases, catalysts, and chemical bonding
- macromechanics: straight line, projectile, circular, and periodic motion, Newton's laws of motion, gravity, weight, mass, and conservation laws
- energy: sources and transformations, and heat
- electricity and magnetism: static and current electricity, circuits, magnetism, and applications
- wave phenomena: electromagnetic spectrum, mirrors, lenses, sound production, and applications
- modern physics/nuclear chemistry: relativity, radioactivity, fusion, and fission

Section 5

Implementation of Program Quality Standards for Subject Matter Preparation of Elementary Teachers



Section 5

Implementation of Program Quality Standards for Subject Matter Preparation of Elementary Teachers

The Program Quality Standards for Subject Matter Preparation of Elementary Teachers are part of a broad shift in the policies of the Commission on Teacher Credentialing related to the preparation of professional teachers and other educators in California colleges and universities. The Commission initiated this broad policy change to foster greater excellence in educator preparation, and to combine flexibility with accountability for institutions that educate prospective teachers. The success of this reform depends on the effective implementation of program quality standards for each credential.

Transition to Quality Standards for All Teaching Credentials

The Commission is gradually developing and implementing Standards of Program Quality and Effectiveness for all teaching credentials. The overall purpose of the standards is to provide the strongest possible assurance that future teachers will have the expertise and abilities they will need for their critically important roles and responsibilities. Among the most significant knowledge and abilities for teaching are those associated with the subjects of the school curriculum.

The Commission began to develop new standards for the subject matter preparation of teachers in 1986. That year the Commission appointed an expert advisory panel in elementary education, which developed Standards of Program Quality for the Subject Matter Preparation of Elementary Teachers. Following an extensive process of consultation with elementary educators, the Commission adopted the subject matter program standards for the Multiple Subject Teaching Credential. The standards have now been implemented by more than 60 colleges and universities, which offer more than 70 programs.

In 1989, the Commission established expert subject matter advisory panels to develop standards for the subject matter preparation of prospective secondary teachers in English, mathematics, science and social science. The panels consisted of K-12 teachers of the subjects, public school curriculum specialists, university professors of the subjects, and other subject matter experts in California. Following extensive consultation with colleges, universities, professional organizations, and local and state education agencies, the Commission adopted the standards in 1992. In a similar manner, in 1991 the Commission established expert panels to develop subject matter standards in art, music, physical education, and languages other than English. These standards were adopted by the Commission in 1994.

In 1995, the Commission appointed advisory panels to develop program standards in agriculture, business education, health education, home economics, and industrial technology education. These standards are scheduled for adoption in 1996.

Improvements in the Review of Subject Matter Programs

In reviewing programs according to the new standards, several major improvements are anticipated.

1. The standards are much broader than the prior guidelines for subject matter programs. The standards provide considerably more flexibility to institutions.
2. As a set, the standards are more comprehensive in addressing the quality of subject matter preparation. They provide a stronger assurance of excellent preparation.
3. The new Program Review Panels conduct more intensive reviews that will focus on program quality issues rather than course titles and unit counts.
4. The new panels have more extensive training because the standards require that they exercise more professional discretion about the quality of programs.
5. Institutional representatives have opportunities to meet with the Review Panels to discuss questions about programs and standards. Improved communications should lead to better decisions about program quality.

Alignment of Program Standards and Performance Assessments

The Teacher Preparation and Licensing Act of 1970 established the requirement that candidates for teaching credentials may satisfy the subject matter requirement by completing approved subject matter programs or by passing subject matter assessments that have been adopted by the Commission. The Commission is concerned that the scope and content of the subject matter assessments be aligned and congruent with the program quality standards in each subject.

To achieve this alignment and congruence in elementary subjects, the Commission asked the Assessment Advisory Panel to develop subject matter assessment specifications that would be consistent in scope and content with the program quality standards in this handbook. Following extensive discussion and review by subject matter experts throughout the state, the Commission adopted a detailed set of Specifications for the Assessment of Subject Matter Knowledge and Competence of Prospective Elementary Teachers. These specifications, which are included in this handbook, now govern the assessment of subject matter competence among students who do not complete approved subject matter programs.

The Commission is pleased that the specifications for subject matter assessments are as parallel as possible with the scope, content and rigor of the standards for subject matter programs. To strengthen the alignment between subject matter assessments and programs, college and university faculty and administrators are urged to examine the specifications as a source of information about content that is important to include in subject matter programs for prospective elementary teachers.

Validity and Authenticity of Subject Matter Assessments

The Commission is concerned that subject matter assessments of prospective teachers address the full range of knowledge, skills and abilities needed by teachers of each subject. For fifteen years the Commission relied on subject matter examinations that consisted entirely of multiple-choice questions. In 1987-88, the Commission evaluated fifteen of these subject matter exams comprehensively. More than 400 teachers, curriculum specialists and college faculty examined the specifications of these tests, as well as the actual test questions. The reviewers' aggregated judgments showed that (1) particular changes were needed in each multiple-choice test, and (2) each multiple-choice test should be supplemented by a performance assessment in the subject.

Since 1989, the Commission's subject matter advisory panels have created Content Area Performance Assessments (CAPAs) for each Single Subject Credential. The CAPAs consist of problems, questions and exercises to which examinees construct complex responses, instead of selecting an answer among four given answers. Examinees' responses are scored on the basis of specific criteria that were created by the advisory panels and are administered by subject specialists who are trained in the scoring process. Candidates for the Single Subject Credentials must pass a CAPA as well as a multiple-choice test of their subject matter knowledge, unless they complete an approved subject matter program. Meanwhile, for the Multiple Subject Credential, the Commission has developed and adopted a new exam (the MSAT) that consists of a Breadth of Knowledge Examination (2 hours) and a Content Skills Assessment (3 hours). By developing and adopting the CAPA and MSAT assessments, the Commission has committed itself to assessing the subject matter knowledge and competence of prospective teachers as validly and comprehensively as possible.

New Terminology for "Waiver Programs"

In 1970 the Legislature clearly regarded the successful passage of an adopted examination as the principal way to meet the subject matter requirement. However, the 1970 law also allowed candidates to complete Commission-approved subject matter programs to "waive" the examinations. Because of this terminology in the 1970 statute, subject matter programs have commonly been called waiver programs throughout the state.

In reality, the law established two alternative ways for prospective teachers to meet the subject matter requirement. An individual who completes an approved subject matter program is not required to pass the subject matter examination, and an individual who achieves a passing score on an adopted exam is not required to complete a subject matter program. Overall, the two options are used by approximately equal numbers of candidates for initial teaching credentials. Subject matter programs are completed by more than half of the candidates for Single Subject Credentials, but the adopted examination is the preferred route for more than half of all Multiple Subject Credential candidates.

Because of the significant efforts of the Commission and its expert advisory panels, subject matter programs and examinations are being made as parallel and equivalent to each other as possible. The term waiver programs does not accurately describe a group of programs that are alternatives to subject matter examinations. For this reason, the Commission uses the term subject matter programs instead of waiver programs, which is now out of date.

Ongoing Review and Approval of Subject Matter Programs

After the Commission approves subject matter programs on the basis of quality standards, the programs will be reviewed at intervals, in approximately the same way as the Commission reviews professional preparation programs in California colleges and universities. Periodic reviews will be based on the Standards of Program Quality and Effectiveness. Like professional preparation programs, subject matter programs will be reviewed on-site by small teams of trained reviewers. Reviewers will obtain information about program quality from institutional documents and interviews with program faculty, administrators, students, and recent graduates. Prior to a review, the Commission will provide detailed information about the scope, methodology and potential benefits of the review, as well as other implications for the institution.

Review and Improvement of Subject Matter Standards

In 1991, the Commission began a cycle of review and reconsideration of the *Standards of Quality and Effectiveness for both Elementary and Secondary Subject Matter Programs*. The standards will be reviewed and reconsidered in relation to changes in academic disciplines, school curricula, and the backgrounds and needs of California students (K-12). Reviews of program standards will be based on the advice of subject matter teachers, professors and curriculum specialists. Prior to each review, the Commission will invite interested individuals and organizations to participate in it. If the Commission modifies the standards, an amended handbook will be forwarded to each institution with an approved program.

Implementation Process and Timeline

In September 1987, the Commission approved an implementation plan and time line for the development and approval of Elementary Subject Matter Programs. Because the subsequent development of the standards took longer than expected, in March 1988, the Commission approved the staff recommendation that the dates in the time line be moved back one year to allow more time for program development (see Page 45). For example, the last date for the admission of candidates into "old" programs was moved back to September 1, 1991, and the final date for the completion of old programs was moved to September 1, 1994. In a subsequent action, the Commission moved the date for completion of old programs to June 1, 1996. The Commission also approved a process for approving alternative standards and Factors to Consider for Elementary Subject Matter Programs, which is described below.

Overview of the Implementation Process

Each California institution of higher education that is regionally accredited and that wishes to develop or continue an Elementary Subject Matter Program may present a proposal to the Commission. To be approved by the Commission, a program must satisfy the Standards of Program Quality in Section 3 of this document. The following steps have been taken to assist universities develop programs

First, the Commission's staff are available to work with the program coordinators and faculty as they develop new programs. This is done either at the campus or through correspondence. The Commission and its staff are eager to see the institutions develop exciting, innovative and challenging programs, and will assist in any feasible way. The agency wants to make the process as uncomplicated as possible. Second, the

review panels operate in a Northern California location and a Southern California location to reduce the costs to institutions that have submitted programs. The location of one of the review panels are within reasonable driving distance of any campus in case the program coordinator needs to confer with the review team. Finally, the Commission sponsored conferences in which institutions that were developing programs shared information and exemplary practices. Many programs are doing an effective and efficient job of implementing particular standards. The coordinators of these programs were asked to share their successes with other institutions. By sharing and borrowing expertise, program developers were able to develop programs more efficiently.

Timeline for Implementing the Waiver Program Standards

March 1988	Commission staff presents Standards of Program Quality for approval by the Commission.
April 1988	Disseminate the Standards of Program Quality for Elementary Subject Matter Programs to all interested parties.
Fall 1988	Staff consultants hold regional meetings to explain the standards and assist the program coordinators. Institutions begin to turn in programs that respond to the standards for informal review.
Spring 1989	First Program Review Team meetings. Northern and Southern Panels meet to review programs that have been submitted for approval (estimated to be approximately fifteen programs in each region).
June 1989	Programs recommended by the Review Team are added to the Commission's agenda by the staff, and are discussed by the Commission with institutional representatives.
Fall 1989 - Spring 1994	Additional meetings of the Review Team as directed by the Executive Secretary on the basis of program submissions and fiscal considerations.
September 1, 1991	After this date, no institution can admit any new students into "old" Multiple Subjects Waiver Programs that have not been approved on the basis of the "new" standards.
September 1, 1996	Candidates who do not complete programs that have been approved on the basis of the standards by June 1, 1996, must pass a standardized assessment of subject matter competence.
1994 and Ongoing	Review teams continue to review programs through mail, electronic and telecommunications.

Elementary Subject Matter Program Conference

Each year the Commission sponsors a conference for Elementary Subject Matter Program Coordinators and other interested persons. The conferences provide an opportunity for coordinators to learn about any new developments that effect their programs to discuss the challenges they are facing, and to share the innovations they have found to be successful. The costs of the meeting facility and materials are paid by the Commission; however, the costs for participants can not be assumed by the Commission.

Review Team Membership, Training, and Decisions

All proposals for the initial approval of Elementary Subject Matter Programs are evaluated by a Review Team, which is selected in accordance with Commission policies. During the first three years of the review process, the Review Team met periodically to review all programs presented to the Commission. To minimize travel, the team was divided into a Northern and a Southern Panel. After the frequency of programs requesting approval decreased, the review teams continued to review programs by mail and telecommunications and, the process was coordinated by the Commission staff.

The Review Team members were selected from nominations solicited from Commissioners, institutions of higher education, professional organizations, subject matter organizations, and the Superintendent of Public Instruction. The members of the team were selected to provide a balance between gender and ethnic groups, and between practitioners and university faculty members.

Each team member possesses particular subject matter expertise. In the first round of reviews, the panels include persons who were involved in the development of the standards, either as member of the Advisory Panel or as individuals who contributed to the development of the standards.

Initial reviews of Subject Matter Programs usually take three days, as follows:

- Day 1: of orientation, preliminary review, and discussion of program documents.
- Day 2: to review programs and prepare initial recommendations to the Commission and/or the institutions.
- Day 3: to meet with representatives of each institution to clarify program intent, discuss the initial recommendations, negotiate any possible changes and write reports.

The training and orientation of team members will include:

- An explanation of the role of the panel, the functions of subject matter preparation programs, and the Commission's responsibilities in program review.
- A thorough review of each standard, its rationale and intent, and alternative ways in which the standard could be met.
- A review of imaginary programs, including acceptable and unacceptable examples.

The Review Team will examine each program on the basis of each standard, rather than in comparison with other programs. It will be the responsibility of the staff consultant to assure consistency in interpreting the standards.

If the Review Team concludes that a proposed program fulfills all of the standards, the Commission's staff adds the proposal to the agenda for the next monthly meeting of the Commission. Usually these programs are placed on the Commission's consent calendar.

If the Review Team decides that a proposed program does not satisfy one or more standards, the Commission's staff will return the proposal to the institution with an explanation of the team's findings. If substantive changes are subsequently made in the institution's proposal, the amended proposal will be resubmitted to the Review Team. A staff consultant and one or more members of the team will be available to assist each institution and answer questions about programs that have not been recommended for approval. Minor or technical changes that are agreed to by the team and the program coordinator may subsequently be reviewed by the CTC consultant, without being reexamined by the team.

Program Documents Prepared by Institutions

Each program proposal should include the following elements:

1. A statement of the program's philosophy, including the purpose of the program and a vision of a well-educated person. The purpose of this statement will be to help the panel understand the orientation of the program, not for the panel to recommend changes in program philosophy.
2. A listing of each standard and a narrative explanation of how the program will meet each standard. Institutions should use factors to consider to guide their response to a standard, and should provide examples to show how the standard will be addressed. Members of the panel are familiar with how college programs are structured and the subjects that are commonly taught in elementary schools. Therefore, explanations can be directed to persons who have considerable expertise in the area.
3. The list of courses that are available to program candidates should be provided early in the program proposal. There should be a clear indication of whether each course is required or elective. Course descriptions and syllabi should also be provided. The program should identify the units of credit for each course and whether the institution uses quarter or semester units. Institutions are encouraged to assemble the following kinds of information for the Review Team to examine for the initial approval of an Elementary Subject Matter Program.
 - Program Description Document
 - Course Syllabi and Catalog Descriptions
 - Lists of Course Readings
 - Advisement Forms and Records
 - Assessment Instruments

Alternative Elementary Subject Programs

On March 4, 1988, the Commission approved the use of its Standards for Approving Alternative Programs as the basis for approving and disapproving alternative standards and/or alternative Factors to Consider for Elementary Subject Matter Programs. These Alternative Standards were adopted as part of *New Designs for Professional Preparation*, the Commission's plan to redesign the evaluation and approval of college and university programs for prospective teachers and other school professionals.

The Commission's adopted policies related to alternative programs authorize colleges and universities to propose alternative standards for the evaluation and approval of professional preparation programs and subject matter preparation programs on their campuses. Three broad standards serve as bases for determining whether to approve the alternative standards submitted by a college or university. These are described below.

Standards for Approving Alternative Standards for Subject Matter Programs

Alternative Standard 1

In each essential domain of subject matter preparation, the alternative program of subject matter preparation is represented by a set of standards and factors to consider that characterize the program as one of high educational merit and quality.

Rationale

To be approved as an alternative Elementary Subject Matter Program, the program must address the subjects commonly taught in elementary schools, and must be represented by a set of standards that have educational merit and quality.

Alternative Standard 2

In each essential domain of subject matter competence, the alternative program of subject matter preparation assesses each candidate on the basis of standards and factors to consider that are directly related to the goals and mission of the program.

Rationale

An alternative program must address the essential domains of subject matter competence. Its standards of competence and verification must be directly related to the overall mission of the program, in order to assure an effective use of the state's educational resources. "Essential domains of subject matter competence" are the categories of skills and knowledge in which well educated persons are expected to be proficient including the subjects that are commonly taught in elementary schools.

Alternative Standard 3

Alternative programs should be distinct departures from "conventional" Elementary Subject Matter Programs.

Rationale

The alternative program's goals, standards, factors to consider and/or curriculum delivery process should be substantially different than those in a traditional program. For example, an alternative program might integrate the delivery of subject matter preparation with the delivery of pedagogical preparation over the entire period of the candidate's initial preparation as a teacher.

Institutions that would like to establish Alternative Elementary Subject Matter Programs should take the following steps.

- Submit a proposed set of alternative standards and/or alternative factors to consider to the Executive Director of the Commission. The institution should clearly label the document as a proposal for an Alternative Elementary Subject Matter Program. On the basis of a staff review of the document's response to the three standards that are stated above, the Commission will approve or disapprove the alternative standards and/or alternative factors to consider.
- Upon approval of the alternative standards and/or factors to consider, the college or university will present a program proposal which describes how each alternative standard and/or factors to consider will be met. This program proposal takes the place of a document that responds to the Commission's "regular" standards or factors to consider.
- The description of the proposed alternative program will be submitted to a review team for approval on the basis of the approved alternative standards and/or alternative factors to consider.

Evaluation of Programs for Continued Approval

After initial approval, Elementary Subject Matter Programs will be reviewed on the same cycle as professional preparation programs, by evaluation teams of approximately five members. Team members will interview program coordinators, subject matter professors, persons responsible for field experiences, persons responsible for assessment, advisors, candidates and recent graduates of the program. Evaluators will also review program documents, course syllabi, assessment instruments, advisement sheets, examples of student work and other documents that are provided by institutions as evidence that the standards of program quality have been met.

Elementary Subject Matter Programs that have been initially approved on the basis of the standards in Section 3 will be evaluated on the basis of the same standards. Alternative programs will be evaluated on the basis of the approved alternative standards and/or factors to consider, using the information sources that are identified above.

Appendix

Assembly Bill 1759



Appendix
Assembly Bill 1759
Chapter 832 of the Statutes of 1987

SECTION 1. The Legislature hereby finds and declares that the breadth and depth of the academic preparation of candidates for multiple subject instruction in elementary schools is the primary basis for the quality of the elementary school curriculum for young children. The Legislature recognizes that most young children learn the subjects of the school curriculum for the first time in elementary schools and classrooms. These early encounters shape each child's subsequent academic successes and failures. Communication skills, reasoning abilities, physical capacities, and personal values also develop as a consequence of early instruction in language arts, mathematics, science, social studies, art, music, health, and physical education.

The Legislature also recognizes that three out of four of the elementary teachers who are prepared in California qualify for their credentials by completing programs of subject matter preparation, which constitute two-thirds of the collegiate education of these candidates.

SECTION 2. Section 44314 of the Education Code is amended to read:

A "diversified" or "liberal arts" program is any program that has been approved by the commission on the basis of standards adopted by the commission.

- a. An approved program shall consist of a minimum of 84 semester units, or equivalent quarter units, including, but not limited to, language studies, literature, mathematics, science, social science, history, humanities, the arts, physical education and human development.
- b. The commission shall establish standards for "diversified" or "liberal arts" programs, or equivalent programs that waive the subject matter examination for multiple subjects instruction.

SECTION 3. The commission shall adopt standards and promulgate regulations to implement this act on or before July 1, 1988, after which the commission shall begin to review and approve "diversified" or "liberal arts" programs on the basis of the standards and regulations. If the commission finds that the criteria and procedures utilized by a non governmental accreditation agency represent a higher standard for "diversified" or "liberal arts" programs than the commission's criteria and procedures for program approval, the commission may approve programs that have been accredited by the non governmental agency without separately reviewing the accredited programs.

(Signed by the Governor September 19, 1987. Filed with the Secretary of State September 21, 1987.)